



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

## RECENT CHANGES IN THE CURRICULUM OF THE PRUSSIAN GYMNASIUM.<sup>1</sup>

IN deciding to speak to you today on this question, I have been influenced not more by the importance and far-reaching effects of the recent changes, than by the conviction that we have much to learn, not only from the excellencies, but also from the mistakes of the Germans. Far too common among American teachers is the attitude of Russell, who in the preface to his *German Higher Schools*, says: "It is, indeed, questionable whether there is anything peculiar to the German theory and practice of teaching, which is directly applicable to British or American conditions." This sentence is rescued from absolute falsity by the qualifying words "peculiar" and "directly," but if it has any point at all, it is that Russell believes we have little or nothing to learn from Germany on the subject of secondary education. He evidently assumes that the existing form of high school is the best possible one for America, or that the German secondary schools are so different in character, that their good points cannot, without fundamental modification, be made to fit into our system, neither of which positions can, in my opinion, be maintained.

We cannot only learn from the excellencies of the German system but also from its failures, and perhaps most of all from the discussions and proposed reforms, for nowhere have the questions relating to the training of the child, the development of the mind, and the moral and culture value of the school and its studies, been discussed with more earnestness or better understanding than by the Germans. In order to touch on all these points with as little confusion as possible, I have divided my paper into three chapters; (1) the development of the Prussian secondary schools up to the year 1901, with an explanation of the meaning and effect of the various changes; (2) the opposing parties on the question of secondary education, their arguments

<sup>1</sup> Read before the Michigan Schoolmaster's Club, March 28, 1902.

and theories; (3) application of the Prussian experience to our own high schools.

#### I. DEVELOPMENT OF THE PRUSSIAN SECONDARY SCHOOLS.

In spite of the commanding position of Prussia among the German states, not even today is its lead in educational matters blindly followed by the other states. Essential and characteristic differences exist, a study of which would surely prove fruitful, but the brief limits of this paper have compelled me to restrict my remarks as far as possible to the Prussian schools. These, in common with the schools of other German states, took their origin from the cloister schools of the middle ages, *i. e.*, Latin schools for the training of the clergy. The first extension was the city school of the fourteenth century; this aimed to train the layman, but subjects and methods were at first the same as in the cloister schools. In the following century we find many city schools where Latin was neglected or even entirely disregarded, but in the sixteenth century it returned with redoubled power, accompanied by Greek. To this century belongs also the rise of the Protestant schools, which under the influence of Luther and Melanchthon became classical schools of a pronounced type; Greek and Latin were looked upon as ends in themselves, and the chief aim seems to have been to read, write, and speak Latin correctly.

In the seventeenth century French gained a good foothold, but mathematics, science, and German made no substantial progress till the eighteenth century. Latin and Greek still continued the paramount studies, while mathematics and French held the second place. The growth in the study of German, history, and science belongs mostly to the nineteenth century.

In 1747 the first real-school was founded in Berlin by Hecker; in this Greek was dropped, but Latin held a prominent place. The movement in this direction was not, however, well supported, and at the end of the eighteenth century, under the influence of Winckelmann, Kant, Schiller, and Goethe, came a decided revival in the study of Greek, and best of all a real study of the literature of both the classical languages.

In 1812 we find Prussia unifying under the name "Gymnasium," all schools which admitted to the universities; for these a plan of studies was issued in 1816, establishing a ten-year course, in which Latin had 76 hours, Greek 50 (in seven years), German 44, mathematics 60, natural science 20, religion 20, geography and history 27, with a few minor subjects. Each student was to have 32 hours a week; French was not taught. This plan was never fully carried out owing to lack of properly qualified Greek teachers in sufficient numbers and the overcrowding of the lower classes with pupils who were not fitting for the university, and did not desire Greek. Yet no thoroughgoing reform was made till 1837, when the course was reduced to nine years. During the preceding twenty years, many non-Latin schools had been latinized, a work which was practically completed at this time; thus the "Realschulen" were in fact "Realgymnasien." According to the new plan of studies issued at this time, Latin received 86 hours during the nine years, *i. e.*, 10 hours a week for the first seven years and 8 hours for the last two, and Greek 42 hours, or 6 hours a week for seven years. French was restored with 12 hours, or 2 hours a week for six years. To make room for these changes, German lost 22 hours and mathematics 27, while many minor changes were made. The number of weekly recitations was 32 for the first five years and 30 for the last four. In spite of this attempt to unify the system of education, non-Latin schools continued to be established, and in 1859 were formally recognized. The real-school of the first class still had nine years of Latin, but in those of the second class with six or seven-year courses Latin was optional, and there was a third class called the higher citizens' schools entirely without Latin.

From this point we might have expected a natural and regular development of these three or four different forms of schools, but the refusal to admit even graduates of the real-schools of the first class to the universities weakened the real-schools and overburdened the "Gymnasium." Not until 1882 was tardy justice done to the "Realschulen" by admitting their graduates to the study of mathematics and science at the universities,

though the nine-year Latin course had won somewhat greater privileges for the "Realgymnasium" as early as 1870.

The new course of study for 1882 also brought some changes, notably a reduction of Latin to 77 hours, the concentration of Greek into six years with a loss of 2 hours, *i. e.*, a total of 40 hours, while French gained 4 hours, history 5, and science 9.

In the "Realgymnasium," Latin was at the same time strengthened by the addition of 10 hours, perhaps in the mistaken hope of weakening its popularity with the masses, and avowedly for this purpose the new higher real-schools without Latin were established and given similar rights of admission to the universities upon completion of the nine-year course.

The same spirit of hostility to the "Real-gymnasium" ruled in the conference of 1890, where, under the influence of the emperor, its abolition was recommended; yet the ministry found these schools too firmly established, and did not venture to take action beyond a mild remonstrance and the refusal to establish new ones.

In reducing the number of weekly recitations, particularly in Latin, the effort of the emperor was more successful. The loss of 15 hours by Latin, 4 by Greek, 2 by French, and 2 by history, in the plan of 1892, was only compensated for by a gain of 5 in German and 2 in drawing, thus leaving a net reduction of 14 hours. The average number of weekly recitations was thereby made 28.

The Latin course was likewise weakened in the "Realgymnasium," while in the higher real-school the French suffered. The changes were satisfactory to no one. What the real-schools wished was recognition and equal rights; this was refused, and the classics were weakened in the gymnasium, in the hope of thus stifling the "Realgymnasium." They asked for bread, they were given a stone. The result was as might be expected; the whole system of education was weakened, the strife between the opposing schools was increased. The victory was for the bureaucratic party, at the head of which stood the emperor, yet

their attempt to reduce all schools to two classes, a classical admitting to the university, and a real-school preparing for practical life—*i. e.*, to transform the “Realgymnasien” into higher real-schools by dropping Latin—was an utter failure. The hopelessness of success in any such attempt is shown by the fact that in 1892, of the 540 secondary schools in Prussia only 60 were without Latin.

The weakened condition of the new gymnasium course was recognized by teachers and officials alike, and in 1895 some slight changes were allowed, particularly the adding of one recitation a week in Latin during the last three years of the course. But no slight changes could allay the strife, and so in 1900 a second conference was summoned in Berlin. The bureaucratic party, which aimed to preserve the gymnasium as the only preparatory school, even at the sacrifice of Greek, was overthrown at once by the desertion of the emperor, whose views seem to have radically changed during the past ten years; his present attitude toward the gymnasium is summed up in his own words: “Am Latein halte ich fest, und das Griechische muss bleiben.” This policy prevailed, and the gymnasium, instead of being still further weakened, was strengthened, while the real-schools were granted their demand to admit students to the university for the pursuance of all studies for which they are prepared. To obtain the full effect of this permission, it will probably be necessary for the universities, or for some university, to offer elementary work in Greek and Latin,<sup>1</sup> and requests for this have already come from the side of the real-schools, but, so far as I can learn, have received no attention.

In the new course of study published at Halle in the fall of 1901, we find for the gymnasium that Greek, Latin, and English (still optional) are strengthened in the plan and aim of the work, though Latin alone gained in hours of recitation. It now has a total of 68 hours, an increase of 6.

In all the languages a knowledge of grammar and ability to write are insisted on, as well as the knowledge of the literature and of the life of the people.

<sup>1</sup>Cf. WERNICHE, *Kultur und Schule*, p. 248.

In the "Realgymnasium," also, Latin receives the same increase as well as an added emphasis on English, geography, and drawing. Noteworthy, also, is the fact that the final examination, ill-famed for its severity, is to be dropped.

The result seems in general satisfactory, and, while it probably will not end the strife, it at least gives the opportunity for each class of schools to develop along its own lines. The scholars from the real-schools will, perhaps, have a thorny path at the university for some time to come, but they will eventually establish their position in those studies for which they are qualified, and the lecture system of instruction will obviate their doing any harm should they wander into classes for which they are not prepared. This change is of the greatest moment for the "Realgymnasium," which has steadfastly maintained its position in spite of great opposition. The course of study, while not as severe as that of the gymnasium, may still be classed as decidedly strong, for it includes Latin, mathematics, German, history, and science during the entire nine years, while French is studied for seven years and English for six. There can be no doubt that students so prepared will be able to do good work in the university, and I believe we may look for a growth in this order of schools for the future. During the past twenty years they have suffered some losses, both in number of schools and of scholars, but this is fully accounted for by the government opposition. Neither should we think that the gymnasium is liable soon to disappear before the rapid increase of the "Realschulen." We ought not to judge about the tendencies in Prussia from the mass of books, articles, or addresses published each year, for it is a well-known fact that the pig which does the most squealing is the one that can't get both feet into the trough. We can judge better of the real tendencies by observing the growth in the number of schools and scholars, yet even here sum totals are liable to be misleading, unless we note with care both the character of the schools and the proportion of students graduating.

The numbers in parentheses show how many had full nine-year courses.

## NUMBER OF SECONDARY SCHOOLS IN PRUSSIA.

	Gymnasien.	Realgymnasien.	Realschulen.
1882..	282 (249)	167 (89)	51 (12)
1887..	303 (264)	177 (88)	53 (11)
1890..	308 (267)	172 (88)	60 (10)
1894..	318 (274)	166 (87)	84 (20)
1897..	330 (277)	152 (85)	86 (26)

## NUMBERS OF STUDENTS.

	Gymnasien.	Realgymnasien.	Realschulen.
1863..	45,403	15,450	3,841
1887..	85,331	35,192	17,065
1890..	80,979	34,465	19,893
1894..	79,293	31,948	26,998
1897..	79,605	60,438	

Another subject, which will be very interesting, is a comparison of the number of graduates from each class of schools, a matter which American writers on the question have persistently overlooked, but in the books at my command I have been able to find reliable figures for but one year, 1894. However, as even the "Oberrealschule," the youngest of the schools, had at that time been graduating pupils for some seven or eight years, the comparative numbers for this year will perhaps serve our purpose.

## TOTAL GRADUATES FOR PRUSSIA IN 1894.

Gymnasium.	Realgymnasium.	Realschule.
4,214	643	47

When we consider that in 1894 there were 26,998 scholars in the real-schools of Prussia, the number of graduates seems almost ridiculous. The great majority of real-schools are, to be sure, only six-year schools, but even for the ten schools with full nine-year courses, which have been in existence since 1882, forty-seven graduates are hardly a respectable number. As far as preparing students for the university is concerned, the higher

real-schools have been up to this time of little or no importance. There is hardly a more prominent university in America whose kind-hearted dean does not admit more ill-prepared students each year than all the "oberrealschulen" of Prussia could possibly send. But we may take it for granted that most of the graduates of the higher real-schools will go to the technical high schools, as they have done in the past; yet even there they form but a small per cent. Launhardt in a report for 1900, in which he shows that the gymnasium graduates succeed equally well in the technical schools, considers all the pupils who took the preliminary examinations at the Hannover Technical School from 1890-99, and gives the sum totals as follows: from Gymnasien, 583; from Realgymnasien, 588; from Oberrealschulen, 38. These numbers are instructive, for they show plainly that the entire growth of the real-schools has been in the first six years of the course. Furthermore, the abnormal size of this growth is in large measure accounted for by the fact that those who have passed the first six years in this school are entitled to a reduction of the compulsory military service to one year; in this respect its privileges are the same as those of the Gymnasium and "Realgymnasium," while the belief is widespread among the pupils that the course is much easier to pass.

## II. THE OPPOSING PARTIES ON THE QUESTION OF SECONDARY EDUCATION.

Here I shall not attempt even to enumerate all the different parties and positions held, but shall content myself with a brief treatment of those which have thus far been of the most account and have fairly well-defined positions. Yet even this modest attempt cannot avoid both generalization and inaccuracy, for the stronger parties are divided into sub-parties, holding views which differ in some respects, and consequently divisions of opposing parties often hold some one or more essential principles in common.

1. The party of the "Einheitsschule." The name implies the aim. It would reduce all secondary schools to a single type, in which all work should be prescribed. It was earlier

the conservative party, and still is essentially conservative. When the Gymnasium was practically the only secondary school, this party wished to retain it in its monopoly, even at the expense of its most characteristic features. Its aim was a single form of school, which should make good citizens of all pupils and should also prepare them for study in higher institutions or for the various government positions. In its original form the party is really dead, but the very conference of 1890, which marked its funeral, was a decided victory for those adherents of the party, who were willing to accept two forms of schools as substitutes for the one previously desired. Probably this new party has done as much damage as all others to the true interest of education; certainly it has made the most dangerous attacks against Latin and Greek, and has been no less ready to curtail any other important study in the interests of *duality*. Educational officers and other government officials quickly rallied to this form of the party, and the number was also increased by adherents of other parties, who thought to gain something for their particular interests by such an alliance.

The two forms of schools which they favor are the gymnasium and the real-school. It was on this basis, with the assistance of the emperor, that they won the victory of 1890. Of the four avowed objects of the emperor, "relief of overworked pupils," "increase in German," "lessening of the classics," and destruction of the "Realgymnasium," the last three plainly belonged to this party.

The important part which the emperor played in this victory can hardly be estimated, especially if, as is said, the conference which so blindly recommended all these changes had been packed with classical men for quite a different purpose. But the program was too revolutionary to be carried out, and the changes made may be looked upon as a makeshift, and were certainly satisfactory to no one. This probably accounts in part for the ill-success of the measures, for there was no strong party among the teachers who cared to have the plan succeed.

With the desertion of the emperor in 1900, this party suffered a defeat as signal as its previous victory. Instead of two,

there are now four different kinds of schools, all preparing for the university. Thus, even if the Reform Gymnasium of Frankfurt should prove a success, it is not likely to replace the three established forms of schools, but only to remain as a fourth with them. Yet this is unquestionably a creation of an "Einheitschule" party, though not of the dominant portion of it; however, as it seems to work against the original principles of the party and is supported by its own adherents, I shall treat it separately later.

2. The realistic and humanistic parties, or practical *versus* classical education. These are the real opponents in the contest at present. The former would teach only those subjects which will have a practical value in life. They believe that mental training and the development of good taste, morality, and conscience are sufficiently provided for in the same practical subjects, while the ancient languages, instead of giving a higher and better development of mind and soul, actually give a mis-development to them. Instead of making good citizens of the boys, they make young Greeks and Romans of them; instead of Christians, they make heathens.

Just as radical on the other side are many of the humanistic party, who hold that the true, full, and complete training is found only in a system of education of which Greek and Latin are the center and support. The realistic education may perhaps train the observation, memory, and reason, but the higher qualities of culture, judgment and conscience are entirely overlooked, while the due preparation and development for higher studies is omitted.

Such are the views of the extremists of both parties, but the foundation for their views is pure theory, for neither a complete realistic nor an entirely humanistic school exists anywhere in Prussia. In the real-schools the study of the modern languages, though supposedly aimed to attain a practical speaking knowledge of the language, also brings a knowledge of formal grammar, an insight into the literature and an understanding of the life and customs of the foreign people, thus in a measure serving as a substitute for the classical languages. The emotional,

æsthetic, and deliberative qualities of the mind are also trained in the study of German, of history, and of religion, which are required in all real-schools.

On the other hand the course of study of the Gymnasium, which includes French and English, history and geography, mathematics far in excess of our best high schools, natural history and physics, chemistry and mineralogy, drawing and, above all, nine years of German, cannot be said to be entirely without practical subjects.

In accord with these facts we find a large and growing division of the opposing parties who believe in living and allowing to live. They recognize the good points in all the different forms of schools, and while they differ as to the exact field to be covered by each kind, they do not deny that their opponents have a right to exist.

We even find conspicuous moderates, who admit special excellencies in the system of their opponents, as Professor Christian Muff of the Landeschule Pforta, a pronounced classicist, who acknowledges the special fitness of the Realgymnasium to prepare students for the study of medicine, though most *doctors* take the opposite view.

On the other side we can mention the famous physicist, Hermann Helmholtz. In a speech a few years before his death he said :

The classical languages have a superiority over the modern as a *vehicle for mental training*, since the native language and the other modern languages, which are learned chiefly by oral practice and imitation, or in so far as they are so learned, cannot so exercise and develop *intelligent, logical thought* as the classical languages with their full system of inflectional endings and their concise and elaborate methods of showing the grammatical relation of the individual parts of the sentences to each other and to the whole.

Undoubtedly this difference in educational value between the classical and modern languages has been emphasized in Germany by the extent and thoroughness of the work in the classics and by the predominance of the oral method in the teaching of modern languages ; and to these additional reasons we may attribute the quite general acceptance of a position on the subject similar

to that of Helmholtz. It is this admission of the inferior educational value of the modern languages in the real-schools, rather than the actual need of a knowledge of Greek, that has so long caused the refusal of free admission to the universities for their graduates. It was the violation of this principle that caused the absolute failure of the school reform of 1892; for the classics were diminished and weakened without anything being put in their place, or any compensating change being made in the method of instruction.

My attention was first called to this condition in 1897 by Professor Emil Hübner, of the University of Berlin, who from his position on the examining board had a very good chance to observe the working of the new course of study. His summary of the results up to that time was as follows:

The ability to read Greek and Latin and the knowledge of the literature has not been much weakened, but the power to write Latin is ruined, while, worst of all, there is manifest an actual decrease in mental power.

Still more explicit is Professor E. Meyer in the January number of the *Zeitschrift f. d. Gymnasialwesen* for 1901, p. 4:

The decrease in hours for the ancient languages, which was brought about by the previous course of study (1892) has not given warrant for its continuance. Although the pupils of this generation are in general ability on a level with those of former generations, yet as early as "Upper Tertia" there is noticeable, in comparison with those former pupils, a decided decrease in mental training, capacity for thought, power of judgment, individuality of conception and in the art of studying. That there should be a less sure and comprehensive knowledge of the classical languages is natural, but that is much easier to bear, than that undeniable weakening of the mental power and the deficiency in scholarly training.

These two opinions will perhaps suffice to show the views of the majority who brought about the restoration of the classics in the new course of study issued last year. The completeness of the victory is further illustrated by the strengthening of Latin in the "Realgymnasium," while the bitterness of defeat for the opposing party was in great measure removed by the granting of practically equal rights of admission to the universities. Thus both parties are in a measure satisfied, and we have a right to look for less bitter contests in the future.

3. The Frankfort Reformgymnasium (formerly known as the Altona plan). As we have seen above this was started as an attempt to find a single type of school, which would satisfy all the requirements of a university preparation and which would also enable the utmost postponement of the moment, when the pupil must decide between university and a business life. In this plan, as a whole, it seems to have no prospects of immediate success, for though it may supplant some of the Gymnasiums, it is altogether too classical to suit any of the realistic party. Yet it has many supporters, particularly in the humanistic party, so that its real destiny, if it succeeds, will be to increase rather than to diminish the variety in the types of secondary schools.

The special features of the reform-gymnasium are three: the beginning of language study with French; extra allotment of time to each study in its beginning; the retention of the Greek course in full. This is accomplished by a nine-year course in French, beginning with six recitations a week, but dropping to two recitations, when Latin begins in "Untertertia." The latter has ten hours a week for two years, then eight for the last four years. Greek begins with "Untersecunda" and has eight hours a week for four years: According to the emperor and the convention of 1900, this course of study has proved a success, but in the Prussian courses of study for 1901, it is alluded to as still in the nature of an experiment.

Even the most classical of the friends of the old gymnasium admit the success with which Greek and Latin are pursued, however they may explain it. The intensity of the effort, though for a shorter period, and the fact that another foreign language precedes are probably the true reasons, though the excellence of the teachers and the exceptional character of the scholars in the Frankfort Gymnasium may have assisted the result.

In mathematics the result seems not to be so favorable, and the reform is condemned by H. Vogt, *Neues Jahrb. f. d. Klass. Altertum . . . u. Pädagogik*, 1901, p. 208, and by Professor Simon in *Baumeister's Handbuch der Erziehungs- und Unterrichtslehre*, p. 34. The criticism aims entirely at the excess of mathematics in the first three years and the weakening of the same in the last four

years of the course; according to Simon "they overload the *children* with mathematics, but let the *young people* go hungry for lack of it."

Both German and the sciences make some slight gains in the lower classes, but not enough to make the school popular with the realist; in fact, in spite of the reduction of hours in the classics, the school remains humanistic in its tendencies and must look to this party for its future support.

In summing up the present condition of the contest in Prussia, I cannot forbear quoting the following sentence from Russell (*German Higher Schools*, p. 399): "When classical education breaks down in Germany, classical culture will vanish from the earth, unless perchance a better than Germany arises." That is a good deal like saying that "when the sky falls, we shall catch pigeons," though he doubtless did not mean it in that sense. The absurdity of the supposition is shown by the classical reaction of the new course of study, by the eagerness of the "Real-gymnasium" for more Latin, and above all by the satisfaction with which the recent reforms have been met even by supposed opponents.

As an illustration of this I quote from the address of Professor Kannengiesser before the Strassburg Philological Conference, October 3, 1901. While pleading for an increase in the number of hours to be devoted to German, he says:

"In the gymnasium *now*, as *previously*, the classics must remain the central point of the instruction." The gratification over the cessation of strife and the acquiescence in the changes seems widespread in Prussia, and we may feel confident that the present reform will at least receive a much fairer trial than fell to the lot of the reform of 1892. In spite of evil prophecies to the contrary, Germany will remain the home of the classics, and the Gymnasium will still continue to furnish that education which Goethe has so nobly described in the words:

A noble man, in whose soul God has placed the capacity for future nobility of character and majesty of soul, will be spiritually and mentally developed by the acquaintance and intimate intercourse with the sublime nature of Greek and Roman antiquity, and with every day will grow perceptibly nearer to a similar greatness.

## III. APPLICATION OF THE PRUSSIAN EXPERIENCE TO OUR OWN HIGH SCHOOLS.

What have we to learn from the Prussians? First, moderation and judgment, avoidance of overhasty changes, and thorough discussion in advance of all proposed reforms. Discussion is perhaps a mania with German schoolmen, but the certainty that all reforms will be thoroughly considered and their results prepared for and discounted in advance is a pledge for stability and good sense and a guaranty against rash and overhasty changes. In other words, before they leap they try to discover where they are going to land. They may not always succeed, but the attempt even is worthy of imitation. Here in America overhaste and arbitrariness are our besetting sins. One superintendent drops Greek, where it is earnestly desired; another puts it in, where there is no demand for it; and both probably neglect English, while they pursue their rival hobbies. The right to make vital changes in the course of study, whether it is really in the hands of the superintendents or of the boards of education, is a dangerous power, and they cannot be too often advised to make use of it only after mature consideration.

Even in the universities the case is no better; but I hardly need to give examples of this, since many of my hearers doubtless remember a case where a university completely changed its degrees first, postponing until afterward the free discussion of the matter and the arrangement of the requirements for graduation.

Another point where we can draw an instructive parallel is in the number of hours of recitation. In Prussian schools the minimum is twenty-eight per week, with us sixteen; as a result the recitation with the Germans is devoted chiefly to real instruction, while here it is rapidly degenerating into a mere quiz hour. This is the real fault in the recent recommendation of four-hour courses for the high schools. There is no proportionate decrease in the amount of work required, therefore the recitations have become more and more overloaded with work, the home study of the pupil is further emphasized, the teacher is robbed of his opportunity to teach, and the school degenerates into an office,

where the scholars report the progress made. In my school days twenty-three to twenty-five recitations a week were the rule, but with every decade it has fallen, each time under the pious pretense of relieving the overworked pupil. Now let me say frankly that I don't believe the high-school pupil is overworked, but, granting that he is, or was, this is not the way to relieve him. If there be any overtaxing of the pupil, it is in the ill-directed home work, and here let the reform be made, but give him more and better instruction.

Another crying evil of our high schools is the lack of continuity in many of the subjects. In the German gymnasium Latin, German, religion, history, and mathematics are continuous throughout the whole nine years' course, and through these its good results in the development and training of the mind are made possible. We cannot hope to equal this, but we can at least bridge over better the break between grade and high school. Let the emphasis come first on English and let the instruction in it be made a systematic whole, instead of the abrupt break at the close of the grades and the lessened attention during the high-school course, which we only too often find.

History and mathematics could also be made continuous throughout a long period of the two courses with the same good results. In the case of mathematics this could, I believe, be well combined with a change in the distribution of hours, so that the high school should receive more and the grade schools less. On this point we can perhaps learn most from the mistakes of the Germans, for it is especially on account of the over-crowding of the early years that the mathematical course of the reform-gymnasium has been widely condemned. The condition in the "Realgymnasium" is almost as bad, and in the higher real-schools it is still worse, for the excess of mathematics compels most of the work to be taken up before the pupils are sufficiently developed to appreciate it. At the Berlin conference of 1890, Professor Hauch, of the Technische Hochschule at Charlottenburg, said that the graduates of these two latter classes of schools, in spite of the extra time put on mathematics, were only apparently more advanced than the Gymnasium graduates, and as an offset

to that, showed a deficiency in interest and in mathematical power.

Probably the point in which we differ most from the Germans is in the time of beginning foreign language study. There it is at the age of ten, even in the real-schools, here it is at the age of fourteen. And yet I believe that no one will deny that it is particularly at the younger age that language can be learned with the most ease and real appreciation of idiom, especially if that language be a modern one and taught orally, thus placing the emphasis on the memory and the power of imitation. This is the plan of the reform-gymnasium of Frankfort, and the success it has achieved there in the face of determined opposition and criticism, often unfair, should lead us to give it earnest consideration. If we could introduce a modern language into the last two or three years of the grades I am sure it would prove as great a success here as it has there, and would not only strengthen the work of the grades, but would also make the work of the high school easier and the results of the same greater. It would, further, be possible to continue this modern language with two or three recitations a week in addition to the regular work of the high-school course, unless we insist upon the present suicidal decrease in the number of recitations weekly.

I had intended to close my paper with a résumé of the German discussions and experience on the subject of practical and disciplinary studies, but I have decided that there is but little new here. They have carried on the discussion on the same general lines that we have, though perhaps with more earnestness. There, as well as here, you can find those who object to disciplinary studies, such as Latin and Greek, on the ground that they are unpractical, but, doubtless, the same persons are still in that stage, where they oppose gymnastic exercises for the development of the body, and think it would be better for the boys to saw wood and the girls to wash dishes. That certain studies have a greater disciplinary value than others is as assured a fact as that others have a greater practical value. Yet all the subjects in our high-school curriculum possess disciplinary value, and that in no small degree, so that here the question

should not be concerning the rejection of any studies, but rather how the present studies may be best accommodated to the varying mental powers of the pupils of different ages. As an example of this we may cite the case of the modern languages. A few years ago they were studied practically in the same manner as the ancient languages, but now the justly praised conversational method is the dominant one. By the change they have gained in practical value, but have lost in disciplinary power, yet this very fact makes them better adapted to an earlier place in our school system, and may well be used as an argument for putting either German or French into the grades—a change which I have discussed above.

I cannot close without taking a parting shot at the so-called practical studies, which many insist should be the only studies of the high school. I believe the idea is a mistaken one and that the studies should be arranged in general according to their disciplinary value, but, supposing we wished to give a preference to practical studies, the question would arise, what are the practical studies? In my own case I can affirm with certainty that Latin, Greek, and English were the practical studies of my high-school course, and I also imagine that if I should ask this question of all here present, I should get an immense variety of answers, and that English would be the one study included by all. This, then, is the one universally practical study of the high school, and, as such, can lay claim to a certain precedence in arranging the course of study; all other subjects must defend their position chiefly on the basis of their disciplinary value.

HENRY A. SANDERS.

THE UNIVERSITY OF MICHIGAN.